UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,923	11/27/2000	Terence Leong	SMQ-114RCE/P5635	4941

66083 7590 07/16/2007	EXAMINER
SUN MICROSYSTEMS, INC. c/o DORSEY & WHITNEY, LLP	LUDWIG, MATTHEW J
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ART UNIT	PAPER NUMBER
2178	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/722,923	LEONG ET AL.
	Examiner	Art Unit	
	Matthew J. Ludwig	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>03 May 2007</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1,2,4-10,13-19,21-27,30-36,38-44,47-53 and 55-59</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1,2,5-10,13-20,22-27,31-37,39-44,48-54 and 56-59</u> is/are rejected.

7) ☒ Claim(s) <u>4,21,30,38,47 and 55</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: Amendment filed 11/13/2006.

2.   Claims 1, 2, 4-10, 13-19, 21-27, 30-36, 38-44, 47-53, 55-59 are pending in the case.

Claims 1, 9, 18, 26, 35, 43, and 52, are independent claims. Applicant cancelled claims 3, 11, 12,

20, 28, 29, 37, 45, 46, 54, and 45.

3.   Claims 1-2, 5-10, 13-20, 22-27, 31-37, 39-44, 48-54, and 56-59, remain rejected under 35

U.S.C. 103(a), as being unpatentable over Fong et al., USPN 6,678,867 filed (7/6/2001) in view

of Bernstein.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   **Claims 1-2, 5-10, 13-20, 22-27, 31-37, 39-44, and 48-54, and 56-59, are rejected**

under 35 U.S.C. 103(a) as being unpatentable over Fong et al., USPN 6,678,867 filed

(7/6/2001) in view of Bernstein et al., Pat Pub. US 2004/0162841.

In reference to independent claim 1, Fong teaches:

Shows a hierarchical view of the DTD Map class object that can be stored in a file

through object oriented techniques (compare to *"requesting to store an instance of an object*

implemented in a first programming language into a database"). See column 12, lines 14-26.

Because the limitation fails to provide any further description of who made the request, the

techniques used in Fong suggests a request being made to store objects within a file.

Figure 5 illustrates a data flow diagram showing the flow of data through the SGML to

HTML mapping and transformation. The reference utilizes DTD in the representation of objects

in the database. Each HTML attribute list is delimited by an HTML Attribute list Begin at the

beginning and an HTML attribute list end (compare to *"providing at least one structured*

document representing the instance of the object including attributes and attribute values

defined for a class). See column 12, lines 32-67.

The user is allowed to create a new map or edit an already existing map. If the user

selects the Edit button from the system allows the user to interact with the system in defining a

map. If the Create Map option is selected, the user is allowed to create a new map (compare to

"adding content of the structured document representing the object into the database"). See

column 16, lines 33-67. Furthermore, the reference describes the default button, which us the

user-defined tag mapping set up by the user interaction with the SGML to JTML Map Edit

dialog box (compare to *"a plurality of structured documents representing a plurality of objects*

originally instantiated in at least two different programming languages"). See column 17, lines

20-67.

A MapCreateEditService is an object created by the MapService, in a call Create (new),

to handle the creation of a map or the modification of an existing map. The MapService passes

the HTML SymbolTable to the MapCreateEditService object from Map Service, in a call

getMapCreateEditServiceObject, so that it may create or edit a map at any time (compare to

"sharing the at least one structured document representing the instance of the object

implemented in a first programming language with an application written in a second

programming language"). See column 18, lines 37-67. The claim language fails to clearly

define what is being shared between the two programming languages. The reference provides a

means for mapping of a source component to plural target components. Fong accepts interactive

user input, to be processed by a map creator, for making plural changes to any of the component

mapping values the user desires until the user inputs a command. Bernstein teaches the sharing

of objects by application programs. More specifically, a repository provides much of the same

capability as the object-oriented database and in addition adds a layer of metadata describing the

objects. The metadata includes information such as data types of attributes, descriptions of object

types, and description of data structures, such as collections. The reference to Bernstein also

provides object structures which contain a group of objects that are organized according to a

particular data structure. This data structure can include a collection, sequence, array, table, or

record structure. It would have been obvious to one of ordinary skill in the art, having the

teachings of Fong and Bernstein before him/her at the time the invention was made, to modify

the SGML to HTML mapping methods of Fong to include the object/application sharing

techniques of Bernstein because it would have allowed for a faster and more efficient mechanism

to access the properties and collections of objects stored in a database. The newly formed

limitation 'providing access to the database of objects such that application programs

implemented in the first and second programming languages are capable of sharing objects

represented as structured documents in the database' fails to accurately define a specific step or

function when read as a whole. The term 'capable of' found within the limitation fails to further

define the claim and fails to require some explicit state from taking place and instead is

interpreted as a specific step which may or may not be required to take place. Therefore, the

reference to Fong in view of Bernstein provides an adequate suggestion of providing access to

the database of objects. See column 17, lines 20-67 and column 18, lines 37-67.

In reference to dependent claim 2, Fong teaches:

Figure 1A. is a declaration for an attribute list for the element. An attribute is a property

of an element that takes on different values for different instances of elements. See column 7,

lines 39-67.

In reference to dependent claim 5, Fong teaches:

First, the SGML document is analyzed to determine the document type of the input

SGML document and the name of the system file where the SGML documents DTD is stored.

See column 8, lines 26-56.

In reference to dependent claim 6, Fong teaches:

The class schema is implemented in SGML, which provides a schema and DTD, which

are common to the generalized markup language as well as the extensible markup language. See

column 8, lines 8-36.

In reference to dependent claim 7, Fong teaches:

The class schema is implemented in SGML, which provides a schema and DTD, which

are common to the generalized markup language as well as the extensible markup language. See

column 8, lines 8-36.

In reference to dependent claim 8, Fong teaches:

The invention has been implemented using object-oriented techniques, although any

programming technique and/or hardware may be used to implement the invention. For purposes

of this description, a class is a description of the structure and behavior of an object, while an

object is an instance of the item described by a class. See column 12, lines 15-35.

In reference to claims 9, 10, 13-19, 21-27, 30-34, the claims reflect the system comprising

computer instructions used for performing the methods as claimed in 1-2, 5-8. In further view of

the following, the claims are rejected under similar rationale.

In reference to claims 35, 36, 38-44, 47-53, 55-59, the claims reflect the article of manufacture

comprising instructions used for performing the methods as claimed in 1-2, 5-9. In further view

of the following, the claims are rejected under similar rationale.

Allowable Subject Matter

6.   Claims 4, 21, 30, 38, 47, and 55, are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

Response to Arguments

7.   Applicant's arguments with respect to claims 1, 2, 4-10, 13-19, 21-27, 30-36, 38-44, 47-

53, 55-59 has been considered but not pursuasive.

Applicant argues on page 11, that objects implemented in different programming

languages are stored in the database in an intermediate format so that the objects can be accessed

by applications written in the first and second programming languages. The language regarding 'intermediate format' could not be found within the limitations of the claim. The reference to Fong does provide a suggestion of limitation regarding "receiving an instance of a second object to store in the database wherein the second object is implemented in a second programming language". Fong provides a means for mapping of a source component to plural target components. Fong accepts interactive user input to be processed by a map creator for making plural changes to any of the component mapping values the user desires until the user inputs a command.

The newly formed limitation 'providing access to the database of objects such that application programs implemented in the first and second programming languages are capable of sharing objects represented as structured documents in the database' fails to accurately define a specific step or function when read as a whole. The term 'capable of' found within the limitation fails to further define the claim and fails to require some explicit state from taking place and instead is interpreted as a specific step which may or may not be required to take place. Therefore, the reference to Fong in view of Bernstein provides an adequate suggestion of providing access to the database of objects. See column 17, lines 20-67 and column 18, lines 37-67.

Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this
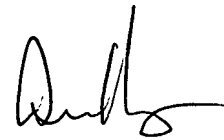
final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Matthew J. Ludwig whose telephone number is 571-272-4127.

The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ML

STEPHEN HONG
SUPERVISORY PATENT EXAMINER